

APPLICANT(S): ARAD, Eli, et al.
SERIAL NO.: 10/501,953
FILED: November 28, 2005

IN THE CLAIMS

Please amend the claims as indicated below.

1. (Currently Amended) A fluorinated zinc-silicate glass having a composition comprised
5 consisting essentially of, in molar percent, of about:
50 to 69% SiO₂,
0 to 13% B₂O₃,
2 to 6.50% Al₂O₃,
0 to 3.90% AlF₃,
10 10.40 to 17% Na₂O,
0 to 3% NaF,
0 ≤ to 18% ZnO,
0 to 3.20% ZrO₂,
0 to 0.80% MgO,
15 0 to 0.66% BaO,
0 to 6.72% CaO,
0 to 0.075% Sb₂O₃, and
0.08 to 0.11% As₂O₃,
wherein the molar percent of at least one of AlF₃ and NaF is greater than 0.
20
2. (Original) The fluorinated zinc-silicate glass of claim 1, wherein said composition further includes in weight percent about 0 to 1 wt % CaF₂.
3. (Currently Amended) The fluorinated zinc-silicate glass of claim 1, wherein said NaF and
25 said AlF₃ provide ~~between about 0 and~~ up to about 12.8 molar percent fluorine.
4. (Original) The fluorinated zinc-silicate glass of claim 1, wherein the glass has a refractive index at 632.8 nm of between 1.512 and 1.541, and a refractive index at 587.6 nm of between 1.514 and 1.544.
30
5. (Original) The fluorinated zinc-silicate glass of claim 1, wherein said Na₂O provides a Na

APPLICANT(S): ARAD, Eli, et al.
SERIAL NO.: 10/501,953
FILED: November 28, 2005

ion species for ion-exchange processes, whereby the zinc-silicate glass is a single exchangeable alkali ion glass.

6. (Currently Amended) An optical article fabricated in a planar slab of a fluorinated zinc-silicate glass by an ion-exchange process, the zinc-silicate glass ~~characterized by having a single alkali ion species for said ion-exchange.~~ consisting essentially of, in molar percent, about

50 to 69% SiO₂,

0 to 13% B₂O₃,

2 to 6.50% Al₂O₃,

0 to 3.90% AlF₃,

10.40 to 17% Na₂O,

0 to 3% NaF,

0 < to 18% ZnO,

0 to 3.20% ZrO₂,

0 to 0.80% MgO,

0 to 0.66% BaO,

0 to 6.72% CaO,

0 to 0.075% Sb₂O₃, and

0.08 to 0.11% As₂O₃

wherein the molar percent of at least one of AlF₃ and NaF is greater than 0.

7. (Cancelled)

8. (Currently Amended) The optical article of claim 76, wherein said glass is further characterized by having a refractive index at 632.8 nm of between 1.512 and 1.541, and a refractive index at 587.6 nm of between 1.514 and 1.544.

9. (Cancelled)

10. (Currently Amended) The optical article of claim 96, wherein said ion-exchange process includes exchanging silver for said sodium in defined areas of said glass.

APPLICANT(S): ARAD, Eli, et al.
SERIAL NO.: 10/501,953
FILED: November 28, 2005

11. (Currently Amended) The optical article of claim ~~10~~6, wherein said ion-exchange provides an optical waveguiding path characterized by an increased refraction index relative to areas surrounding said path.

5